

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
11 January 2001 (11.01.2001)

PCT

(10) International Publication Number  
**WO 01/02598 A3**

(51) International Patent Classification<sup>7</sup>: G01N 33/50

(21) International Application Number: PCT/EP00/05863

(22) International Filing Date: 23 June 2000 (23.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
9915225.8 30 June 1999 (30.06.1999) GB  
9915226.6 30 June 1999 (30.06.1999) GB  
0004629.2 29 February 2000 (29.02.2000) GB

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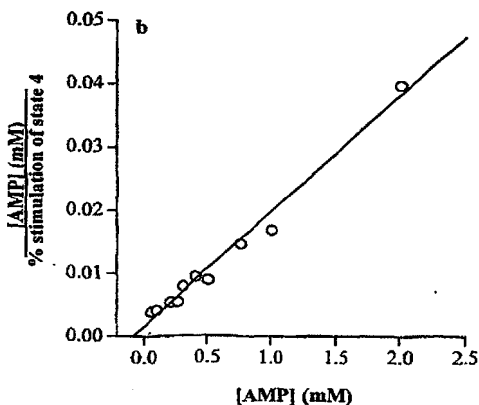
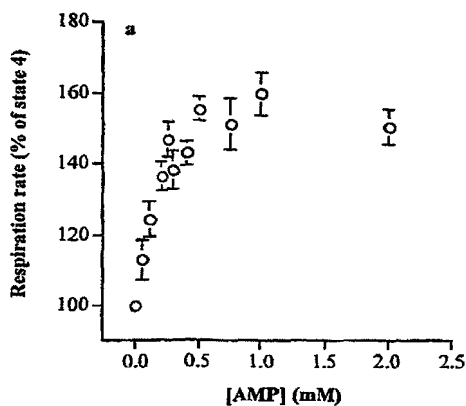
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(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,  
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian

[Continued on next page]

(54) Title: SCREENING FOR COMPOUNDS MODULATING MITOCHONDRIAL PROTON LEAK



(57) Abstract: The present invention provides a screening method for the identification of compounds which modulate an AMP-sensitive regulatory site on mitochondria comprising the steps of: a) contacting a test compound with mitochondria in the presence of a substrate for respiration in the presence of a buffer system; b) measuring an index of metabolic rate; and c) identifying compounds which modulate metabolic rate. Alternatively or additionally membrane potential can be measured. The invention also comprises a regulatory site for a mitochondrial proton leak which is related to the adenine nucleotide carrier, a binding assay and a functional assay.

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